

## **ABSTRACT OF THE DISCLOSURE**

### **FAST SEARCHING OF LIST FOR IP FILTERING**

A method for filtering data packets through computers on the Internet that allows a computer to determine whether an incoming numbered list is present in a numbered list data set faster than the prior art methods. The present invention comprises an Array Creation Program (ACP) and an Array Matching Program (AMP). The ACP creates a plurality of arrays from the numbered list data set. The values of the array fields are based on the numbers in the numbered lists. The AMP analyzes the numbers in the incoming numbered list to determine the hexadecimal values in the array fields associated with the numbers in the incoming numbered list. The AMP uses a counter to process the numbers in the incoming numbered list. If the counter becomes zero, then the incoming numbered list is not present in the numbered list data set. An embodiment utilizing hashtables is also disclosed.